AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

1. (currently amended): A V-belt continuously variable transmission comprising:

an input shaft;

an output shaft;

a primary pulley that is connected to the input shaft and whose groove width ~~changes~~ is configured to change in accordance with a supplied fluid pressure;

a secondary pulley that is connected to the output shaft and whose groove width ~~changes~~ is configured to change in accordance with a supplied fluid pressure;

a V-belt that is wrapped around the primary pulley and the secondary pulley; and

a controller that is configured ~~functioning~~ to:

when a speed ratio of the transmission is to be increased,

set the fluid pressure supplied to the primary pulley to a fluid ~~fluid~~ pressure necessary for ensuring a torque capacity of the V-belt and necessary for maintaining the speed ratio, and

set the fluid pressure supplied to the secondary pulley to a fluid ~~an fluid~~ pressure that is increased from ~~higher than~~ the fluid pressure necessary for ensuring the torque capacity of the V-belt and necessary for maintaining the speed ratio by an amount necessary for~~, thereby~~ attaining a target speed change speed.

2. (currently amended): A V-belt continuously variable transmission ~~according to claim 1,~~ comprising:

an input shaft;

an output shaft;

a primary pulley that is connected to the input shaft and whose groove width is configured to change in accordance with a supplied fluid pressure;

a secondary pulley that is connected to the output shaft and whose groove width is configured to change in accordance with a supplied fluid pressure;

a V-belt that is wrapped around the primary pulley and the secondary pulley; and

a controller that is configured to: ~~wherein the controller further functions to:~~

compute a pulley ratio maintenance thrust force, which is a thrust force necessary for maintaining ~~the speed~~ a speed ratio, for each of the pulleys;

compute a thrust force correction amount for achieving ~~the target~~ a target speed change speed; and

when ~~increasing the speed ratio,~~ the speed ratio is to be increased:

set the fluid pressure supplied to the primary pulley to a fluid pressure necessary for ensuring a torque capacity of the V-belt and necessary for maintaining the speed ratio, and

set the fluid pressure supplied to the secondary pulley to a fluid pressure that is higher than the fluid pressure necessary for ensuring the torque capacity of the V-belt and necessary for maintaining the speed ratio, thereby attaining the target speed change speed;

supply a fluid pressure to the primary pulley corresponding to the pulley ratio maintenance thrust ~~force,~~ force; and

supply a fluid pressure to the secondary pulley corresponding to the sum of the pulley ratio maintenance thrust force and the thrust force correction amount.

3. (currently amended): A V-belt continuously variable transmission according to claim 2, wherein the controller is further configured ~~functions~~ to:

convert the target speed change speed into a pulley stroke speed; and

compute the thrust force correction amount from the pulley stroke speed and the pulley ratio.

4. (currently amended): A V-belt continuously variable transmission according to claim 1, further comprising:

a first valve for regulating a fluid pressure from a fluid pressure pump to a line pressure;

a second valve for regulating a fluid pressure supplied to the primary pulley using the line pressure; and

a third valve for regulating a fluid pressure supplied to the secondary pulley using the line pressure,

~~wherein: the~~ wherein the controller is further configured ~~functions~~ to:

set the larger of the pressure supplied to the primary pulley and the pressure supplied to the secondary pulley as a target line pressure; and

control the first valve such that the line pressure becomes the target line pressure.

5. (currently amended): A speed change control method for a V-belt continuously variable transmission having: a primary pulley connected to an input shaft and whose groove width is configured to change ~~changes~~ in accordance with a supplied fluid pressure; a secondary pulley connected to an output shaft and whose groove width ~~changes~~ is configured to change in accordance with a supplied fluid pressure; and a V-belt that is wrapped around the primary pulley and the secondary pulley, the method comprising:

when a speed ratio of the transmission is to be ~~increased,~~ increased:

setting the fluid pressure supplied to the primary pulley to a fluid ~~an fluid~~ pressure necessary for ensuring a torque capacity of the V-belt and necessary~~, and necessary~~ for maintaining the speed ratio; and

setting the fluid pressure supplied to the secondary pulley to a fluid ~~an fluid~~ pressure that is increased from ~~higher than~~ the fluid pressure necessary for ensuring the torque capacity of the V-belt and necessary for maintaining the speed ratio by an amount necessary for attaining a~~, to thereby achieve the~~ target speed change speed.